

Little Ravens *Corvus mellori* hunt, kill and eat individuals of two species of shorebird

The Little Raven *Corvus mellori* is an omnivore that occasionally eats small birds. Most birds taken are thought to be eaten as carrion, though several records exist of ravens hunting and killing Budgerigars *Melopsittacus undulatus* and a Spotted Turtle-Dove *Streptopelia chinensis* (Higgins *et al.* 2006). Both cases of bird depredation record Little Ravens attacking from above and stabbing prey to death with their beaks. Here, we report a pair of Little Ravens hunting, killing and eating a lone Sharp-tailed Sandpiper *Calidris acuminata* at Cheetham Wetlands, near Melbourne, Victoria (37° 53' 56"S, 144° 47' 33"E; 420 ha; see Antos *et al.* 2007 for a description). We also report an event which strongly implies they hunted and ate an adult Red-capped Plover *Charadrius ruficapillus*, and observations of hunting and eating eggs and chicks.

Sharp-tailed Sandpiper

On 17 March 2010 we were conducting field work as part of a breeding study of Red-capped Plovers (Bywater 2009; Ekanayake 2011) when we noticed a pair of Little Ravens swoop down from a perch on power lines, to a small channel that is used extensively by foraging shorebirds. We witnessed a single Sharp-tailed Sandpiper jumping up towards one of the ravens several times, before the raven wheeled around and descended at the location. The location featured raised embankments on two sides of the channel, upon which the ravens perched, effectively cornering the sandpiper. We momentarily lost sight of both raven and sandpiper, but within half a minute had driven to a point where we observed one raven consuming the recently killed sandpiper. When our vehicle disturbed the ravens, they flew slowly along a roadway, carrying the sandpiper, and landing occasionally to eat more parts of it. This is the first record we are aware of which documents a migratory

shorebird species as prey of Little Ravens that was captured by apparently co-operative hunting.

Without knowing the condition of the Sharp-tailed Sandpiper before it was killed, we are unable to conclude whether this species constitutes a regular part of the Little Raven's diet. This may have been an opportunistic kill, given the Sharp-tailed Sandpiper was alone, which is somewhat unusual.

Red-capped Plover adults, eggs and young

On 11 November 2010, KE was conducting field work on Red-capped Plovers (Ekanayake 2011) and observed a pair of Little Ravens moving along a raised embankment. Red-capped Plovers nest on these embankments and adjacent edges of the ponds in the study site (Bywater 2009). Both ravens were carrying prey in their beaks. When approached, one raven was seen consuming a bird, the other, an egg. Startled by my presence, the ravens took off to a nearby power pole, dropping the prey to the ground. Upon closer inspection it was found that the prey was a Red-capped Plover egg and an adult Red-capped Plover, of which only the right wing, part of the belly and the two legs remained. An ABBBS metal band and a flag with unique two letter engraving were found on the left leg; the bird proved to be a female Red-capped Plover that was captured on her nest by the investigators on 12 March 2010.

This predation event leads us to believe that Little Ravens either adopt a co-operative hunting strategy, or in this case, a strategy involving prey ambush, where they detect an incubating Red-capped Plover and successfully kill it by approaching from behind (many Red-capped Plover nests at the study site are tucked under cover). The condition of the female Red-capped Plover before its death was unknown; however, it was likely to have been in good condition as

it was presumed to be an incubating/breeding bird (since the other raven was consuming a Red-capped Plover egg) and its condition and the presence of the eggs strongly suggest it was not eaten as carrion. Nevertheless, this provides evidence of Little Ravens' ability to hunt, kill and eat not only adult migratory but also adult resident shorebirds.

A pilot study using nest cameras has shown that ravens are the most common cause of nest failure among Red-capped Plovers at the study site (see Fig. 1 for a nest camera image). They have also been seen actively hunting and eating young Red-capped Plover chicks. On 17 September 2009, we observed a pair of Little Ravens attacking a brood of Red-capped Plovers; locating the hidden chicks by walking around the agitated parents, searching in cover and in places atypical of chick refuges, seizing them in their beaks and flying with them to

nearby power lines where they were consumed. Thus, Little Ravens prey upon all life phases of Red-capped Plovers.

Conclusion

These observations support other records indicating that Little Ravens are skilled predators and have the ability to hunt and kill small bird species, including their eggs and young (Higgins *et al.* 1996; Santisteban *et al.* 2002). The study site features abundant ravens, present year round, and they are considered a voracious predator of Red-capped Plovers (Ekanayake 2011 unpubl.). Given that they are generally regarded as super-abundant (Barrett *et al.* 2003), their activities may warrant management in future.

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Fig. 1. A nest-camera image of a Little Raven taking a Red-capped Plover egg at Cheetham Wetlands.

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A 'naming tree' story

Introduction

In 2002, two eucalypt seedlings were planted in Darebin Parklands, Alphington, as part of a ceremonial 'naming' day for six-month old twins. Almost nine years later, the seedlings have become tall saplings offering evolving habitat and amenity for wildlife and the public over future decades and beyond. Reflections on this simple private activity are explored as a potential means to enhance public good conservation.

Description

On Boxing Day 2002, seedlings of a Red Iron Bark *Eucalyptus tricarpa* and a River Red Gum *E. camaldulensis* (about 0.6 m high) were planted in Darebin Parklands as part of a 'naming day' ceremony for six month old twins (Fig. 1). These species were part of the original revegetation of Darebin Parklands by Cam Beardsell in the early 1980s. The species are both long-lived and flower at different seasons, with the Red Ironbark providing important winter flowering for a range of fauna. The seedlings were of local provenance (obtained from LaTrobe University Wildlife Reserve nursery) and planted with the permission and placement advice of Peter Wiltshire (Ranger of Darebin Parklands). The seedlings were staked but otherwise unmarked and

were watered occasionally over their first three years (in drought conditions). By 2011, they had become substantial self-sustaining saplings (height 10.0 m and 7.0 m with a dbh of 170 mm and 110 mm, Fig. 2).

The private objectives and incorporated public good outcomes were to:

- provide a focal point for the family, and specifically the children, to watch and reflect upon the growing eucalypts and the changing faunal use of the trees by insects, birds and mammals over their life time;
- watch and observe other peoples' enjoyment of the site over time;
- actively nurture nature in a public space and provide a small contribution to the greater conservation amenity of the site and to provide decades of habitat availability for wildlife species, both residents and visitors.

The site is periodically visited and, to date, is achieving the initial private aims. The trees have anonymously melded into the overall parklands and will flower in the next few years. They 'belong' to two people but simultaneously to everyone – a private meaning with a tangible social and environmental outcome.